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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,431	04/22/2004	Ching Man Tsui	033539-021	8776

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EXAMINER

NGUYEN, VINH P

ART UNIT	PAPER NUMBER
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.2829

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/829,431

Applicant(s)

TSUI ET AL.

Examiner

VINH P. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. Applicant's arguments filed 10/26/06 have been fully considered but they are not persuasive.

Applicants argued that the windows (22) in Jeong (Pat # 5,990,692) are not grooves and the leads (12) of Jeong do not lie on the support plate (20).

Examiner disagrees with Applicants about this issue. "groove" is a broad term, therefore an aperture or an opening would be qualified as "channel" and it is broadly considered as "groove". Therefore, Each of the window (20) in Jeong (Pat # 5,990,692) is considered as a channel and it would be qualified as "groove".

Furthermore, When the device of Jeong is in operated, the lead frame (10) will be positioned directly on the lead frame support member (20), therefore all elements including the leads (12) of the semiconductor devices on the lead frame (10) would be supported by the lead frame support member (20).

It appears that the device of Jeong still meet the limitations of the instant claims 1-5 and 8-12.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5,8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeong et al (Pat # 5,990,692).

As to claim 1, Jeong et al disclose a testing apparatus for non packaged semiconductor chip having a lead frame (10) with at least one row of non singulated semiconductor devices (1), a main body (40), a lead frame support member (20) with at least one groove (22) for receiving semiconductor devices (1) such that in use leads extending from said devices lie on a surface of said support member (20).

As to claim 2, the lead frame support member (20) is formed with a plurality of parallel grooves (22).

As to claims 3, Jeong et al disclose means for releasably gripping said lead frame (10) so as to hold the lead frame in place.

As to claim 4, the gripping means comprises a pair of gripping members (46) disposed on respective sides of said grooves (22) when the lead frame are held in place.

As to claim 5, Jeong et al disclose means (60,62,64,68) for moving the gripping members (46) into and out of engagement with the lead frame (10).

As to claim 8, wherein the gripping means (46) extends through apertures (26) formed on the lead frame support member (20).

As to claim 9, Jeong et al disclose the main body (40) is formed with locating pins (48) for locating the lead frame support member (20) on the main body (40).

As to claim 10, having the main body formed of conducting material and provided with means for electrically grounding the main body is considered an intrinsic property of the apparatus of Jeong et al.

As to claim 11, the lead frame support member (20) of Jeong et al formed of a highly resistive insulating material is considered an intrinsic property of the apparatus of Jeong et al

As to claim 12, the main body (40) is provided with identification means (42,44). It is noted that the term "identification means" is a broad term, therefore the openings "42,444" would qualified as "identification means.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al in view of Boegh-Petersen (pat # 4,833,402).

For examination purpose, Examiner consider "moving means is an activated compressed air .

As to claim 6, Jeong disclose a testing apparatus for non packaged semiconductor chip as mentioned in paragraph # 5 above. However, Jeong et al do not mention about the moving means is actuated by compressed air.

However, Boegh Petersen teaches that it would have been well known to use the air compressed air motor as moving means .

It would have been obvious for one of ordinary skill in the art to use an air compressed motor type as taught by Boegh Petersen in place of a cylinder as a part of the moving means of Jeong et al so that the movement of the gripping members into and out of engagement with the lead frame is easier.

6. Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose a plurality of pairs of gripping members are provided and wherein said compressed air is provided directly to one said pair and is distributed to the other pairs by an air distribution assembly formed in the main body and wherein the main body is formed with means for coupling the main body with a transport mechanism as recited in claims 7 and 13 and in combined with other claimed elements.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ryan et al (Pat # 3,560,849) disclose liquid temperature controlled test chamber and transport apparatus for electrical circuit assemblies.

Takekawa et al (Pat # 4,763,409) disclose method of manufacturing semiconductor device.

Shreeve et al (Pat # 5,121,053) disclose tab frame and process of testing same.

Ryan (Pat # 3,761,808) discloses a testing arrangement.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to 431 whose telephone number is 571-272-1964. The examiner can normally be reached on 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HA T. NGUYEN can be reached on 571-272-1678. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


VINH P NGUYEN
Primary Examiner
Art Unit 2829
01/08/07